

REMARKS

Summary of Office Action

Claims 21-54 are pending in this application.

The Examiner finally rejected claims 21-54 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description and the enablement requirement.

Claims 21-54 have also been finally rejected under 35 U.S.C. § 112, second paragraph, for being indefinite.

The Examiner objected to the drawings for not showing every feature specified in the claims.

Rejections of Claims 21-54 Under 35 U.S.C. § 112, First Paragraph (Re: Written Description)

Claims 21-54 have been finally rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description. The Examiner said the claim limitation “protrusions configured and dimensioned to have the same pitch and mate with threads on a bone-engaging member” is deemed to be new matter.

These rejections are respectfully traversed.

As clearly shown in applicant's FIGS. 9 and 10, the two pairs of protrusions 6 fit within adjacent grooves of the thread on head 8 of screw 7. Pitch, with respect to a screw thread, is defined as the distance from one point on a screw thread to a corresponding point on the next thread measured parallel to the axis of the screw. Thus, for example, the pitch of the thread on head 8 of screw 7 is the vertical distance, as shown in applicant's FIG. 9, between two adjacent “peaks” (or “crests” in thread terminology) or two adjacent “troughs” (or “roots” in thread

terminology). The same pitch can be measured from, for example, the adjacent peaks of either pair of protrusions 6.

Therefore, the claim limitation, “protrusions configured and dimensioned to have the same pitch and mate with threads on a bone-engaging member,” is not new matter.

Accordingly, applicant respectfully requests that these rejections of claims 21-54 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Rejections of Claims 21-54 Under 35 U.S.C. § 112, First and Second Paragraphs

Claims 21-54 have been finally rejected under 35 U.S.C. § 112, first and second paragraphs, for failing to comply with the enablement requirement and for being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention, respectively. The Examiner said the term “double entry” is not adequately described in the specification and that it is unclear what structure is being claimed by the term “double entry.” The Examiner also said that “double-entry thread” as discussed by applicant on page 10 of the April 9, 2007 Reply To Office Action is not an art-recognized term.

These rejections are respectfully traversed.

Applicant respectfully submits that a “double-entry thread” is well understood in the art and that, accordingly, a detailed description of such a thread in the specification is not necessary and that the structure of the claim limitation “the threaded head portion having a double entry” is clear to persons of ordinary skill in the art. Applicant respectfully submits the following examples as proof:

Thompson U.S. Patent No. 4,580,225, issued April 1, 1986, titled “Method For Producing Multiple Entry Threads; see in particular column 1, lines 31-36: “to produce a double

entry thread by the prior art method, an initial thread is cut, then the cutting tool is backed off from the initial entry point by one-half of the thread lead (the thread lead is the distance between turns of the same thread)” (emphasis added);

Papesh et al. U.S. Patent No. 3,649,143, issued March 14, 1972; see column 4, lines 41-44: “The spirals further have a ... double thread arrangement, such that the spiral pitch, which may be 5/8 inch actual, is by the double entry made in that case a 1 ¼ inches pitch” (emphasis added);

Butler U.S. Patent No. 4,578,856, issued April 1, 1986; see column 4, lines 36-39: “These flutes 44 may preferably comprise a triple-entry screw thread, but they may be a single-entry, double-entry, or some other form of plural-entry screw thread” (emphasis added);

Woodings et al. U.S. Patent No. 5,169,256, issued December 8, 1992; see column 2, lines 35-38: “conventional ... drill rod assemblies are normally provided with ... double entry threads” (emphasis added);

Heflin et al. U.S. Patent No. 5,478,331, issued December 26, 1995; see column 4, lines 29-30: “the rapidly advancing, double entry threads used on Luer locks” (emphasis added);

Miller U.S. Patent No. 6,152,643, issued November 28, 2000; see column 5, lines 1-6: “heavy thread designs that can be utilized, such as ... double entry threads ... which ... are well known ... for the purpose of providing a more robust coupling” (emphasis added); and

Miceli et al. U.S. Patent No. 6,446,823, issued September 10, 2002; see column 4, lines 40-42: “Suitable engaging means may include ... a double entry thread” (emphasis added).

As the above examples demonstrate, a “double-entry thread” is known in the art and, thus, the structure of the claim limitation “the threaded head portion having a double entry” is clear. Claims 21-54 therefore comply with the enablement requirement and are not indefinite.

Accordingly, applicant respectfully requests that the rejections of claims 21-54 under 35 U.S.C. § 112, first and second paragraphs, be withdrawn.

Objection to the Drawings

The Examiner objected to the drawings for not showing every feature specified in the claims. In particular, the Examiner said “the threaded head portion having a double entry” is not shown.

This objection is respectfully traversed.

As discussed above, a double entry thread is well known in the art.

Further, 37 C.F.R. §1.83 states that “conventional features disclosed in the ... claims ... where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated ... in the form of a graphical drawing symbol.”

Applicant respectfully submits that the depiction of a thread on head 8 of screw 7 in FIGS. 1-3 and 7-9 satisfies rule 1.83.

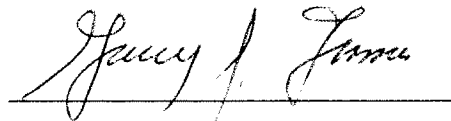
Accordingly, applicant respectfully requests that the objection to the drawings be withdrawn.

Conclusion

The foregoing demonstrates that claims 21-54 are allowable. This application is

therefore in condition for allowance. Reconsideration and allowance are accordingly respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, reading "Garry J. Tuma", is written over a horizontal line.

Garry J. Tuma
Registration No. 40,210
Attorney for Applicant

JONES DAY
Customer No. 51832
222 East 41st Street
New York, New York 10017
(212) 326-3939